

## **FINDING OF NO SIGNIFICANT IMPACT**

safe drinking water act — south carolina state revolving fund

**PROJECT:** City of Rock Hill  
Rock Hill Water Treatment Plant and Lake Wylie Raw Water Intake Upgrade  
York County

This Department, under Section 48-5-40 of the Code of Laws of South Carolina, has the authority and responsibility to conduct environmental reviews and approve drinking water Preliminary Engineering Reports (PER) prepared for the Drinking Water State Revolving Fund Program. Our review has determined that implementation of the plan identified below will not cause a significant environmental impact and the Department hereby issues a Finding of No Significant Impact (FNSI).

This FNSI precedes approval of the PER entitled "Preliminary Engineering Report – Rock Hill Water Treatment Plant and Lake Wylie Intake Upgrade and Expansion to 48 MGD," dated February 2017. The plan recommends construction at the water treatment plant and the Lake Wylie intake structure to upgrade and expand the facility to enhance and provide reliable performance. The City of Rock Hill will implement the plan. The following Environmental Assessment summarizes the environmental effects of the proposed facilities.

### **ENVIRONMENTAL ASSESSMENT**

**Need for New Facilities:** The City of Rock Hill owns and operates the surface water treatment plant on Cherry Road, with a raw water intake approximately 4.5 miles away on Lake Wylie at 3900 Elks Park Road. This facility is the largest supplier of drinking water in York County serving approximately 118,000 people, directly and indirectly, in the City of Rock Hill, Town of Fort Mill, Riverview Rural Water District, York County, City of Tega Cay, Catawba Indian Nation and the Lake Wylie community. Treatment plant improvements and rehabilitation are needed to enhance plant performance and maintain compliance with the drinking water standards. The overall goals of this project include reduction of disinfection byproducts to minimize potential health risk to the public, improve operational flexibility and reliability, optimize treatment performance, minimize operational and capital costs, and rehabilitation of the water treatment plant and raw water intake.

**Proposed Facilities:** The attached figure shows the project location. The proposed project consists of:

- construction of a new chemical feed system and electrical building at the raw water intake;
- increasing emergency power at the raw water intake;
- repairing the clearwater baffles;
- adding covers for plate settlers in the existing sedimentation basins;
- installing settled water and finished water turbidity meters;
- rehabilitation of the instrumentation and upgrading the piping in the existing filter gallery;
- replacing the filter media;

- replacing the Supervisory Control and Data Acquisition (SCADA) software and hardware for system-wide compatibility;
- repairing concrete in the existing sedimentation basins;
- improving energy efficiency with the installation of variable frequency drives in the existing High Service Pump Station #2; and
- improving residual solids management by installing a new gravity thickener/holding tank, replacing the pumps in the drain pump station, and constructing a new sludge pump station to feed sludge from the new thickener to the force main which transports it to the Manchester Creek Wastewater Treatment Plant.

Additional construction related to the expansion of the water treatment plant to 48 million gallons per day is detailed in the PER, but is outside the scope of the State Revolving Fund loan project and therefore, not detailed in this FNSI. The estimated total capital cost for this project is \$44,002,614, with the SRF portion of this project described above estimated at \$15,085,725.

**Environmental Consequences:** The construction of this project will occur at the current water treatment plant and raw water intake sites. Minimal environmental impacts will result from the proposed construction. Although floodplains may occur in the planning area, the proposed project will be designed to result in minimal impacts to these floodplains consistent with any needed 404 permits by the Corps of Engineers (e.g., preconstruction contours will be restored). There are no important farmlands, wild and scenic rivers, endangered/threatened species, wetlands, or national natural landmarks located where they are likely to be impacted by implementation of the proposed project. Short-term, minor disturbances associated with construction — such as traffic interference, noise, dust, vegetation loss, erosion and sedimentation — will be minimized through the use of best-management construction practices. Demographic analysis and project information indicate no significant impact on minority or low-income population.

### COMMENTS

Comments in support or disagreement received within 30 days of the date of this FNSI will be evaluated before approval of the preliminary engineering report. If you wish to comment, either email ([gormancm@dhec.sc.gov](mailto:gormancm@dhec.sc.gov)) or write to:

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City of Rock Hill WTP and  
Lake Wylie Raw Water  
Intake Upgrade  
SRF Project 4610002-08  
Location Map

